

The opinion in support of the decision being entered today is  
*not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* AURELIA MAZA, THADDEUS RUSSELL ZIEGERT,  
JAMES D. BENSEMA,  
and CHRISTOPHER E. LANGBEIN

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Appeal 2007-1678  
Application 09/800,547  
Technology Center 1700

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Decided: July 30, 2007

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Before PETER F. KRATZ, CATHERINE Q. TIMM, and  
LINDA M. GAUDETTE, *Administrative Patent Judges*.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 1, 3, 5, 6, 8-11, 13-16, 18-26, 28, and 29. This is the second appeal in this case (see Decision mailed September 30, 2004). We have jurisdiction under 35 U.S.C. § 6(b).

## I. BACKGROUND

As in the previous appeal, the invention relates to a process for making a dressing and the dressing made. Since the prior appeal, Appellants have amended claim 1, the only independent claim. Claim 1 is illustrative of the subject matter on appeal. We reproduce claim 1 below emphasizing the differences from the prior claim 1 on appeal by italicizing the additions and bracketing the deletions:

1. A process for making a dressing comprising the steps of:

(a) combining raw ingredients *comprising an oil phase and an aqueous phase* in a pre-mix tank comprising a means for mixing to form a coarse emulsion, and

(b) processing the coarse emulsion in *a single* [one] pass through an in-line mixer/emulsifier comprising at least one set of stator and rotor, and *an adjustable* [a variable] speed motor to drive the rotor, wherein the stator and rotor comprise co-axially engageable rings of teeth having a plurality of concentric vanes and concentric wells with generally slanted side walls from each vane to each well and the rotor and stator when engaged are such that the concentric vanes of the stator align with the corresponding concentric wells of the rotor and the concentric vanes of the rotor align with the corresponding concentric wells of the stator with the corresponding generally slanted walls of the stator and rotor aligned and when engaged a gap having an axial opening dimension and slanted opening dimension is defined by each concentric vane and each concentric well and the aligned slanted walls and the gap is adjustable in increments of about 0.015 inches in axial opening dimension,

*wherein said axial opening dimension is about 0.010 inches to about 0.500 inches;*

*wherein the diameter of the stator and rotor is about 9 inches or more;*

*wherein the adjustable motor operates at up to about 3,600 rpm;*

*said process having a throughput rate of about 100 pounds per minute to about 1,000 pounds per minute;*

[wherein] the dressing *being* [is] mayonnaise or a salad dressing and an oil phase and an emulsifier phase are raw ingredients combined in the pre-mix tank;

*further wherein the mayonnaise and salad dressing are made in the same production line; and*

*wherein said dressing comprises about 0.1 to about 0.3% emulsifier.*

(emphasis added.)

The Examiner relies on the following prior art references to show unpatentability:

Trainor	US 4,423,084	Dec. 27, 1983
Ross	US 5,632,596	May 27, 1997
Akashe	US 6,235,336 B1	May 22, 2001

The rejections maintained by the Examiner are as follows:

1. Claims 1, 3, 5, 6, 8-11, 13-16, 18-26, and 28 are rejected under 35 U.S.C. § 103(a) as unpatentable over Trainor in view of Ross; and
2. Claim 29 is rejected under 35 U.S.C. § 103(a) as unpatentable over Akashe in view of Ross.

## II. DISCUSSION

### A. Issue

In reviewing the rejections, we consider the dispositive issues arising from the contentions in the Brief filed September 19, 2006 and the Answer filed November 03, 2006.

With respect to the rejection over Trainor in view of Ross, Appellants contend that Trainor does not teach various limitations of the claims and Ross does not cure the deficiencies of Trainor (Br. 8-11). With respect to the rejection over Akashe in view of Ross, Appellants argue that the combination does not teach what is claimed and there is no motivation to make the combination (Br. 12-14).

For each rejection, the dispositive issue in this appeal is: Have Appellants overcome the rejection by either (1) showing that there is insufficient evidence of prima facie obviousness to support the rejection or (2) by rebutting the prima facie case with evidence of secondary indicia of nonobviousness such as a showing of unexpected results? *See In re Kahn*, 441 F.3d 977, 985-86, 78 USPQ2d 1329, 1335 (Fed. Cir. 2006) (“On appeal to the Board, an applicant can overcome a rejection by showing insufficient evidence of prima facie obviousness or by rebutting the prima facie case with evidence of secondary indicia of nonobviousness.” (emphasis omitted)).

At the outset we note that in the previous Decision of September 30, 2004, we affirmed the decision of the Examiner rejecting claims 1-27 under 35 U.S.C. § 103(a) as unpatentable over Trainor in view of Ross, the same rejection is now maintained by the Examiner against amended claims 1, 3, 5,

6, 8, 9-11, 13-16, 18-26, and 28. Appellants do not dispute any of the findings or conclusions of law contained in the prior decision.

In accordance with the findings we made in the prior Decision and the findings we make below, we conclude that a preponderance of the evidence supports a prima facie case of obviousness.

#### B. Facts

The following facts are supported by a preponderance of the evidence:

1. Trainor describes a process for preparing salad dressings. The process includes a step of pre-mixing raw ingredients to form a coarse emulsion and pumping the mixture, a coarse emulsion, directly to a colloid mill (e.g., Ex. 1). A colloid mill is a mixer/emulsifier. Therefore, Trainor feeds a coarse emulsion through an in-line mixer/emulsifier.
2. The raw ingredients fed into the pre-mixer of Trainor include a cooked starch paste (aqueous phase), another aqueous mixture including emulsifiers (emulsifier phase), and liquid salad grade vegetable oil (oil phase) (Trainor, col. 3, ll. 59 to col. 4, l. 29).
3. Trainor describes processing the coarse emulsion in a single pass through the colloid mill (Fig. 1; col. 6, ll. 19-41).
4. Example 4 of Trainor describes a process having a throughput rate within the claimed rate (6000 pounds per hour equals 100 pounds per minute). As is evidenced by the Examples, the throughput rate may vary (compare Ex. 1 (11 lbs./min) and Ex. 4 (100 lbs./min.)).

5. Trainor describes using a conventional colloid mill with a rotor and stator (Trainor, col. 6, ll. 25-31).
6. Ross is directed to a rotor and stator assembly for mixers and emulsifiers such as the mill employed by Trainor.
7. Akashe is directed to an egg yolk composition and exemplifies a process of using the egg yolk composition to prepare mayonnaise products (Example 1).
8. The mayonnaise product of Akashe's Example 1 is free of starch (Table in Example 1, col. 6, ll. 19-28)).
9. To form the mayonnaise of Example 1, Akashe homogenizes the emulsion in a rotor/stator device (Example 1, col. 6, ll. 7-33).

#### C. Principles of Law

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966). *See also KSR*, 127 S.Ct. at 1734, 82 USPQ2d at 1391 (“While the sequence of these questions might be

reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”)

“The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR Int’l v. Teleflex Inc.*, 127 S. Ct. at 1739, 82 USPQ2d at 1395. The question to be asked is “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.*

#### D. Analysis

Turning first to the rejection over Trainor in view of Ross, we determine that Appellants have not shown that the use of a colloid mill mixer/emulsifier modified to have the rotor and stator arrangement of Ross is more than the predictable use of prior art elements according to their established functions. Appellants have merely argued that Trainor does not describe some aspects of the claimed process and Ross does not remedy those deficiencies, but Appellants’ arguments do not take into account the true scope of the claim nor what the references as a whole, taking into account the knowledge in the art of mixing and emulsifying dressings, would have taught to those of ordinary skill in the art.

In an attempt to distinguish the claimed process from that suggested by the prior art combination, Appellants characterize claim 1 as “directed to a process for making a mayonnaise and/or salad dressing composition in the same production line such that a coarse emulsion is sent through an apparatus in a single pass. Only one production line is required in order to make two distinct dressing compositions.” (Br. 8-9). Appellants then

contend that “there is no teaching whatsoever in Trainor '084 regarding making multiple products in one pass.” (Br. 10). This brings up an issue of claim interpretation. Specifically, does claim 1 require making multiple products in one pass?

Claim 1 does not require making multiple products in one pass. Claim 1 is directed to a process for making a dressing, “the dressing being mayonnaise *or* a salad dressing.” (Claim 1, l. 21 (emphasis added)). Because “or” is used between “mayonnaise” and “salad dressing,” the claim encompasses making either *one* of the dressings and does not require both be made. The language “wherein the mayonnaise and salad dressing are made in the same production line” (Claim 1, ll. 23-24), does not modify an affirmative step of the process. The process steps recited in the claim describe a one pass operation in which one dressing is made. The clause “wherein the mayonnaise and salad dressing are made in the same production line” seems to merely define a future act and is not particularly limiting on the affirmative process steps of the claim.<sup>1</sup>

Appellants further contend:

[Trainor] does not teach, suggest, or disclose, for example, the steps of forming a premix of raw ingredients which include an oil phase and an emulsifier phase to make a coarse emulsion to be fed in a single pass to an in-line mixer/emulsifier having a specific stator and rotor arrangement as claimed. Furthermore, Trainor '084 fails to disclose or suggest texture characteristics

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<sup>1</sup> Should these claims be the subject of further prosecution, the Examiner should consider whether the claims fail to comply with 35 U.S.C. § 112, ¶ 2 in failing distinctly to claim what Appellants in their Brief insist is the actual invention. *See In re Collier*, 397 F.2d 1003, 1005, 158 USPQ 266, 267-68 (CCPA 1968).



as set forth in the presently claimed invention. Moreover, Trainor '084 cannot achieve the high throughput rates with its colloid mill, in contrast to the present invention. As stated in the Specification, it is impossible for colloid mills to achieve the same high throughputs as those of the equipment of the present invention, despite the common elements of stator and rotor.

(Br. 10).

Trainor does, in fact, describe forming a premix of the claimed raw ingredients (FF 2) and feeding the resulting coarse emulsion to an in-line mixer/emulsifier, i.e., a colloid mill (FF 1). While Trainor does not set forth the details of the stator and rotor arrangement, Appellants do not dispute the Examiner's finding that such a stator/rotor arrangement is taught or suggested by Ross (Br. 11). Therefore, the question is: Would it have been obvious to one of ordinary skill in the art to use the rotor/stator of Ross in the mill of Trainor? We determine that Appellants have not shown that such a combination is nonobvious. Trainor discloses the use of a mill with a rotor and stator (FF 5). Ross describes a rotor and stator arrangement for use in the same type of mill (FF 6). Appellants have not shown that the use of a mixer/emulsifier or colloid mill with the known rotor and stator of Ross is more than the predictable use of prior art elements according to their established functions. *See KSR*, 127 S. Ct. at 1739-40, 82 USPQ2d at 1395-96 (The question to be asked is "whether the improvement is more than the predictable use of prior art elements according to their established functions.").

With respect to texture characteristics discussed in Appellants' argument, it is unclear what claimed characteristics Appellants are referencing. Claim 1 does not disclose texture characteristics and the

argument is not specific enough to allow us to determine whether the argument is directed to a specific limitation of another claim.

With respect to high throughput, Appellants provide no evidence in support of the statement that “Trainor ‘084 cannot achieve the high throughput rates with its colloid mill.” (Br. 10) Appellants argue that the Specification states it is impossible for colloid mills to achieve the same high throughputs as those of the inventive equipment, but Appellants do not cite to the portion of the Specification including this statement. Therefore, the statement is unsupported by evidence.

Moreover, Trainor suggests that throughput may vary, smaller sized processes requiring less throughput than larger processes (FF 4). The throughput depends on the quantity of dressing one seeks to produce. For instance, a pilot plant will have a lesser throughput than a commercial operation. One of ordinary skill in the art would size the equipment accordingly. Appellants themselves disclose using the rotor/stator arrangement of Ross (Specification 7:7-14). Appellants do not disclose making any particular adjustments to the rotor/stator of Ross to obtain the claimed throughput, therefore, it follows that one of ordinary skill in art of dressing production would have been capable of using the Ross rotor/stator at the claimed throughput.

Appellants state that the invention is further defined by the dependent claims (Br. 9). They, however, do not advance any sufficiently specific arguments highlighting how the Examiner erred in rejecting the dependent claims that would allow us to review the rejection with regard to those claims.

Appellants state that the combination of references does not contemplate all the unexpected benefits achieved by their process, but they provide no objective evidence in support of this argument (Br. 11). Arguments in the Brief cannot take the place of evidence.

Turning to the rejection over Akashe in view of Ross, Appellants contend that Akashe is directed to one possible ingredient in a dressing composition, egg yolk, and is not directed to a starch-free dressing as claimed (Br. 12-13). Appellants' contention overlooks the portion of the reference relied upon by the Examiner, i.e., the portion disclosing the use of the egg yolk ingredient in forming a starch-free mayonnaise. The reference teaches the starch-free mayonnaise as required by claim 29 (FF 7-8).

Appellants further argue that there is no motivation to combine Akashe with Ross (Br. 13). Appellants have not shown an error in the rejection on this basis. Akashe describes using a rotor/stator device to homogenize and further emulsify the mixture of mayonnaise ingredients (FF 9). Ross describes a known rotor/stator device for emulsifying (FF 6). Appellants have not shown that the use of the Ross rotor/stator device as the rotor/stator device of Akashe is more than the predictable use of a conventional device for its established function. "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *See KSR Int'l v. Teleflex Inc.*, 127 S. Ct. at 1739, 82 USPQ2d at 1395 (2007).

### III. CONCLUSION

We conclude that Appellants have failed to overcome the rejections advanced by the Examiner.

### IV. DECISION

The decision of the Examiner to reject claims 1, 3, 5, 6, 8-11, 13-16, 18-26, 28, and 29 under 35 U.S.C. § 103(a) is affirmed.

### V. TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal maybe extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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